

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPEAL FROM THE EXAMINER TO THE BOARD
OF PATENT APPEALS AND INTERFERENCES

Application No.: 09/978,432

Applicant: : Yaseen et al.

Filed : October 15, 2001

Title: : End-to-End Governed Data Transfers in a Network

Art Unit : 2143

Examiner : Bilgrami, Asghar H.

Docket : 131105.1001

Customer No : 32914

MAIL STOP: APPEAL BRIEF PATENTS

Commissioner for Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

Dear Sir:

APPEAL BRIEF

Applicants have appealed to the Board of Patent Appeals and Interferences from the decision of the Examiner mailed June 13, 2005, finally rejecting Claims 1-15. Applicants filed a Request for Pre-Appeal Brief Review together with a Notice of Appeal on September 20, 2005.

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REAL PARTY IN INTEREST

The present application was assigned to Metera Networks, Inc., by an assignment from the inventor recorded on October 15, 2001, in the Assignment Records of the United States Patent and Trademark Office at Reel 012272, Frame 0071. The present application was subsequently assigned to Fujitsu Network Communications, Inc. by an assignment from Metera Networks, Inc., recorded on October 15, 2001, in the Assignment Records of the United States Patent and Trademark Office at Reel 012272, Frame 0062 and then to Fujitsu Limited by an assignment from Fujitsu Network Communications, Inc., recorded on July 18, 2005, in the Assignment Records of the United States Patent and Trademark Office at Reel 016778, Frame 0746.

RELATED APPEALS AND INTERFERENCES

There are no known appeals or interferences that will directly affect or be directly affected by or have a bearing on the Board's decision in this pending appeal.

STATUS OF CLAIMS

Claims 1-15 stand rejected pursuant to a Final Office Action mailed June 13, 2005. Claims 1-15 are presented for appeal.

STATUS OF AMENDMENTS

No amendment has been filed subsequent to the mailing of the Final Office Action.

SUMMARY OF CLAIMED SUBJECT MATTER

Independent Claims 1 and 9

The two independent claims, claims 1 and 9, contemplate two nodes (e.g. Fig. 1, elements 10-12) of a packet switched data network (e.g. network 100 of Fig. 1) that are interconnected by at least one communication channel (e.g. pipe 50 or hose 40 of Fig. 1). Each node has one of an egress or an ingress flow restriction associated with it for data transfers between that node and another node on the at least one communication channel. (P. 4, lines 27-29, and p. 9, lines 24-27.) Claim 1 requires a management node (e.g. management node 60, Fig. 2) that disallows “at least a portion of a requested transmission from the first node to the second node” when a rate restriction on either the first or the second node for the interconnecting channel is violated by the transmission. (P.8, lines 10-12; p. 10, lines 1-3.) Claim 9, which is directed to a method, does not require a “management mode”, but like claim 1, the method requires disallowing transfer of at least some data between the two nodes interconnected in violation of rate restrictions on data transfers between the nodes on the at least one communication channel.

Dependent Claims 3, 4, 11 and 12

Dependent claims 3 and 11 limit the type of nodes in claims 1 and 9, respectively, to optical transport network nodes. (P.5, lines10-13) Dependent claims 4 and 12 require that the at least one communication channel recited in each of the independent claims 1 and 9 be comprised of a fiber optic link. (P.5, lines 10-13)

Dependent Claims 5 and 13

Claim 5 depends from claim 1; claim 13 depends from claim 9. Each specifies that the at least one egress rate restriction includes an egress committed rate and an egress peak rate, and that the at least one ingress rate restriction includes an ingress committed rate and an ingress peak rate. (P. 6, line 29 to p.7, line 14)

GROUNDΣ OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether the rejection of 1-3, 5-10 and 13-15 under 35 U.S.C. §102(e), as being anticipated by U.S. Patent Publication No. 2002/0107908 of Dharanikota et al. (“Dharanikota et al.”) was in error.
2. Whether the examiner has made a *prima facie* rejection under 35 U.S.C. §103(a) for claims 4, 11 and 12 based on the combination of Dharanikota et al. and U.S. Patent Publication No. 2002/0018264A1.

ARGUMENT

A. Standard

1. 35 U.S.C. § 102(e)

Under 35 U.S.C. § 102(e), a claim is anticipated only if each and every element as set forth in the claim is found in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987); M.P.E.P. § 2131. In addition, "[t]he identical invention must be shown in as complete detail as contained in the . . . claims" and "[t]he elements must be arranged as required by the claim." *Richardson v. Suzuki Motor Co.*, 9. U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989); *In re Bond*, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990); M.P.E.P. § 2131.

2. 35 U.S.C. § 103

To establish a *prima facie* case of obviousness under 35 U.S.C. § 103, three basic criteria must be met: First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; second, there must be a reasonable expectation of success; and finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Vaeck*, 947 F.2d 488, (Fed. Cir. 1991); M.P.E.P. § 2143. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *Id.* Further, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990); M.P.E.P. § 2143.01. Additionally, not only must there be a suggestion to combine the functional or operational aspects of the combined references, but also the prior art must suggest both the combination of elements and the structure resulting from the combination. *Stiftung v. Renishw PLC*, 945 F.2d 1173, 1183 (Fed. Cir. 1991). Moreover, where there is no apparent disadvantage present in a particular prior art reference, then generally there can be no motivation to combine the teaching of another reference with the particular prior art reference. *Winner Int'l Royalty Corp. v. Wang*, 202 F.3d 1340, 1349 (Fed. Cir. 2000).

B. Argument

1. Rejection of Claims 1-3, 5-10 and 13-15 Under § 102(e)

Dharanikota et al. explain that their invention is “directed to a network element (e.g., an edge router, core router, or transit router, collectively, a routing element) that is organized as a plurality of terminating line cards or TLKs interconnected via a switch fabric capable of supporting virtual ingress/egress pipes (VIEPS) between transmitter cards (ingress cards) and receiver cards (egress cards).” Paragraph [0012]. The example that is disclosed is a single network element 200, possessing a plurality of termination line cards (TLKs) 202A, etc., interconnected by a switching fabric 204. See, Fig. 2 and paragraph [0031]. Each TLK has one side that communicates with the switching fabric and another side that communicates with an external link. See Fig. 3.

The examiner cites paragraphs [0012], [0054] and [0059] of Dharanikota et al. in support of his contention that it anticipates the two independent claims 1 and 9, as well as dependent claims 2, 3, 5-8, 10, and 13-15. Paragraph [0012] describes only “a network element (e.g., an edge router, core router, or transit router, collectively, a routing element)” Paragraph [0054] describes using counters on egress and ingress TLKs of a single network element. Paragraph [0059] describes only marking packet streams within the network element using a three-color marker (TCM).

Applicants’ claim 1 is directed to two nodes, with a third management node that disallows data flow across a communications channels between the two nodes when an egress rate restriction on one of the nodes, or an ingress rate restriction on the other node, is violated by the data flow. The method of claim 9 also contemplates two nodes, but not a management node. The method requires disallowance of data flow on a communication channel between two nodes when either an egress rate restriction on one node, or an ingress rate restriction on another node, would be violated by the data flow.

Dharanikota et al. make no mention in the passages cited by the examiner of setting ingress and egress rate restrictions for each of a plurality of nodes connected by at least one communication channel. In the cited paragraph [0054], they discuss counters 506 in ingress TLKs of the network element for monitoring traffic switched to queues in TLKs on the egress side, and using counters 512 to monitoring traffic egressing from the element. The counters are used only to monitor performance of the network element. There is no mention of monitoring data flow between nodes of

a network. The examiner's statements in the Final Office Action to the contrary are paraphrases of the claim, not of Dharanikota et al.

Furthermore, Dharanikota et al. make no mention in the cited passages of disallowing traffic flow on a channel between nodes on a network when an egress rate restriction on one node, or an ingress rate restriction on another node, is violated. The examiner cites paragraph [0059] for his contention that this limitation is met by Dharanikota et al., but this paragraph simply states:

The TCMs [three color markers] 600A and 600B can be used to mark a packet stream in a service, where decreasing levels of assurances (either absolute or relative) are given to packets depending on their color. For example, a service may discard all red packets, because they exceeded both CIR and CBS, forward yellow packets as best effort, and forward green packets with a low drop probability (e.g., AF traffic).

The relevance of this passage to the claims is not explained. It has no easily discernable relevance to the claim limitation against which it is being cited. Again, in his reasoning in support of the rejection, the examiner is simply paraphrasing the claim.

Finally, with regard to claim 1, there is no management node disclosed by Dharanikota et al.

The rejections of the dependent claims, they are premised on the same misreadings mentioned above in connection with independent claims 1 and 9, and are therefore in error for at least those reasons.

The examiner, in responding to applicant's arguments, in the Final Office Action, states, "[w]hen reviewing a reference the applicants should remember that not only the specific teachings of a reference but also reasonable inferences which the artisan would have logically drawn therefrom may be properly evaluated in formulating a rejection." *See Office Action*, June 16, 2005, at page 5. The examiner cites *In re Preda*, 401 F.2d 825 (CCPA 1968) and *In re Shepard*, 319 F.2d 194 (CCPA 1963).

It is not clear to applicants whether the examiner is in fact relying on inherency in making his *prima facie* case. He does not appear to be doing so in paragraphs 3-9 of the June 13, 2005, Detailed Action. However, if he is, then he has the burden of establishing a *prima facie* case of inherency by identifying those limitations which are inherently disclosed and how those limitations necessarily flow

from Dharanikota et al. See M.P.E.P. § 2112 at IV, 8th Ed. (2005), citing Ex parte Levy. Levy, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (“the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied art.”). He has provided no such reasoning or evidence in support of such reasoning. Should the examiner provide this reasoning in his reply, applicants reserve the right to respond.

In sum, there is not just one, but multiple claimed elements and limitations missing from Dharanikota et al., and the examiner has failed to provide any meaningful explanation for how missing elements and limitations may be logically and necessarily derived from the teachings of Dharanikota et al. Therefore, for at least these reasons, the rejection of claims 1-3, 5-10, and 13-15 is in error and must be reversed.

2. The Rejection of claims 5 and 13 Under § 102(e)

Additionally, regarding the rejection of claims 5 and 13, the examiner cites paragraphs 12, 28 and 35 collectively in his reasons in paragraph 6 of the June 14, 2005, Detailed Action for rejecting claims 5 and 13. However, he provides no detailed reasoning on how the claim limitations read onto these paragraphs. The reasoning in paragraph 6 is nothing more than a paraphrase of the claims and, to the undersigned representative, bears little resemblance to what is stated by Dharanikota et al. in the cited paragraphs. Without the benefit of any meaningful explanation from the examiner on how these claims read onto the cited paragraphs, and given that the paragraphs appear to be unrelated to the subject of claims 5 and 13, applicants are at a loss on how to respond, other than to state that the paragraphs do not teach any of the claimed elements and that the examiner has not met his burden of establishing a *prima facie* case.

3. Rejection of Claims 3, 4, 11 and 12 Under § 103(a)

The rejection of claims 3, 4, 11 and 12 as being obvious in view of the combination of Dharanikota et al. and Kodialam et al. are premised on the same erroneous reading of Dharanikota et al. discussed above. Therefore, given the missing elements and limitations, this combination cannot meet each and every limitation of the claims. The rejection is in error for at least this reason.

4. Other Errors

Given the fundamental errors addressed above, applicants have chosen not to address other errors in the examiner's reasoning. The failure to address them should not be construed as acquiescence in the examiner's reasoning.

CONCLUSION

In view of the errors noted above in the examiner's rejections of claims 1-15, applicants respectfully request the Board of Patent Appeals and Interferences to reverse the final rejection of the examiner and instruct the examiner to issue a notice of allowance of all claims.

Attached please find a check in the amount of \$500.00. Although no other fee is believed due, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 07-0153 of Gardere Wynne Sewell LLP, referencing docket number 131105.1001.

Respectfully submitted,

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CLAIMS APPENDIX

1. A network comprising: a first node and a second node having at least one communication channel interconnecting the nodes, the first node and the second node each having at least one ingress rate restriction for data transfers from the respective node over the at least one communication channel, and at least one egress rate restriction for data transfers to the respective node on the at least one communication channel; and a management node having communication channels with at least one of the plurality of nodes, the management node being operable to disallow at least a portion of a requested transmission from the first node to the second node when one of the ingress and egress rate restrictions of the first or second node is violated by the requested transmission.
2. The network according to claim 1, wherein the network is the Internet.
3. The network according to claim 1, wherein the first node and the second node are optical transport network nodes.
4. The network according to claim 1, wherein the at least one communication channel is a fiber optic link.
5. The network according to claim 1, wherein the at least one egress rate restriction includes a egress committed rate defining a minimum transfer rate reserved in the network for transfers to the respective node and an egress peak rate defining a maximum transfer rate allowable in the network for transfers to the respective node, and the at least one ingress rate restriction includes an ingress committed rate defining a minimum transfer rate reserved in the network for transfers from the respective node and an ingress peak rate defining a maximum transfer rate allowable in the network for transfers from the respective node.
6. The network according to claim 1, wherein the at least one communication channel is a point-to-point communication channel.

7. The network according to claim 1, wherein the at least one communication channel is a point-to-multipoint communication channel.

8. The network according to claim 1, wherein an allowed transmission from the first node to the second node includes either the requested transmission or a portion thereof the management node monitoring transmission from the first node to the second node.

9. A method of transmitting packet-switched data in a network having a plurality of nodes therein, the method comprising the steps of: defining an ingress rate restriction for each of at least two nodes of the plurality of nodes, the ingress rate restriction limiting the amount of data that may be transmitted from the respective node on at least one channel of the network; defining an egress rate restriction for each of the at least two nodes of the plurality of nodes, the egress rate restriction limiting the amount of data that may be transmitted to the respective node on the at least one channel of the network; monitoring the amount of data transmitted from and to a first node; and disallowing at least a portion of one of an attempted data transfer from and to the first node when one of the respective ingress rate restriction and egress rate restriction would be violated by the attempted data transfer.

10. The method according to claim 9, wherein the network is the Internet.

11. The method according to claim 9, wherein the at least two nodes are optical transport network nodes.

12. The method according to claim 9, wherein the at least one channel is a fiber optic link.

13. The method according to claim 9, wherein defining the at least one egress rate restriction further includes defining an egress committed rate that defines a minimum transfer rate reserved in the network for transfers to the respective node from the plurality of nodes and defining an egress peak rate that defines a maximum transfer rate allowable in the network for transfers to the respective node from the plurality of nodes, and defining the at least one ingress rate restriction further includes

defining an ingress committed rate that defines a minimum transfer rate reserved in the network for transfers from the respective node to the plurality of nodes and defining an ingress peak rate that defines a maximum transfer rate allowable in the network for transfers from the respective node to the plurality of nodes.

14. The method according to claim 9, wherein the at least one channel is a point-to-point communication channel terminated at respective ends by the at least two nodes.

15. The method according to claim 9, wherein the at least one channel is a point-to-multipoint communication channel.

EVIDENCE APPENDIX

None

RELATED PROCEEDINGS APPENDIX

None